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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,619	06/30/2004	Ahmed Gasmi	FR01 0194US	4323
24738 7590 01/23/2008 PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 370 W. TRIMBLE ROAD MS 91/MG SAN JOSE, CA 95131			EXAMINER WELLS, KENNETH B	
			ART UNIT 2816	PAPER NUMBER
			MAIL DATE 01/23/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,619

Applicant(s)

GASMI ET AL.

Examiner

Kenneth B. Wells

Art Unit

2816

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/30/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 6/30/04 has been partially considered by the examiner. The non-patent literature documents have not been considered because they have not been provided by applicant

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Abstract of the Disclosure

3. The abstract of the disclosure is objected to because it does not commence on a separate sheet that is part of the specification in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Specification

4. The disclosure is objected to because of the following

informalities: on page 1, line 12, "the" (first occurrence) should be deleted, and on line 13 "the" (second occurrence) should also be deleted.

Appropriate correction is required.

Drawings

5. The drawings are objected to because Figs. 1A and 1B need "prior art" labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it cannot be determined if applicant is invoking 112, sixth paragraph or not, i.e., applicant recites on line 5 "means for reducing the switching time and for increasing the amplitude" but then later in the claim recites specific structural detail of this means. Also in claim 1, "the high and low logic levels of the transistors of the differential pair" lacks antecedent basis. Moreover, note that transistors do not have high and low logic levels (i.e., only signals have high and low logic levels). Finally in claim 1, the terms "brief" and "intense" are improper relative terms, i.e., neither the specification nor claims define how brief or intense the current

pulses would have to be so as to be within the scope of the claims.

In claim 3, line 4, "the first and second low inputs" lacks antecedent basis. Note the same problem on line 5 with regard to the recitation of the first and second high inputs.

In claim 4, the word "bias" on the last line should be changed to --voltage-- for purposes of clear antecedent basis.

In claim 5, the word "biases" on line 2 should be changed to --voltage sources-- for purposes of clear antecedent basis.

In claim 6, line 3, "for lowering the impedance" is not understood, i.e., lowering the impedance of what? Note that this is again an antecedent basis problem. As a minor point, on line 1 of claim 6, "as" (first occurrence) should be deleted because it is redundant in view of the amendment to add --as claimed in claim 1--.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Miura, cited by applicant.

As to claim 1, note Fig. 4 which shows a differential amplifier circuit for regenerating complementary digital signals, including a differential pair of transistors N1 and N2 whose inputs receive complementary digital signals and whose outputs provide regenerated complementary signals; the "means for reducing the switching time and increasing the amplitude of the voltage swing" reads on the circuitry formed by transistors P46, P45, N48 and N47; and the recited function of delivering "under a low impedance and during the switching, brief and intense current pulses of said complementary input signals of increased amplitude in order to apply these pulses to the inputs of the differential pair of transistors" is seen to be inherent during the operation of the Miura Fig. 4 circuitry (i.e., the two push-pull transistor pairs will have the function of reducing switching time, increasing amplitude of its output

voltage swing and providing, under a low impedance and during switching, "brief and intense" current pulses, to the extent these terms are understood).

As to claim 2, note that the push-pull pairs of transistors P46, P45, N48 and N47 are connected upstream from the differential transistors N1 and N2, and also note that the signals applied to the gates of these transistors are differential (i.e., complementary) input signals.

As to claim 3, the recited first and second low/high inputs, to the extent understood, read on the input signals applied to the gates of transistors P46, P45, N48 and N47.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura.

As to claim 4, the recited connection between the drain

electrodes of the high side transistors and the bias source is not met because transistors P46 and P45 are PMOS rather than NMOS, but this does not distinguish patentably over Miura's Fig. 4 circuitry because it is old and well-known in the art that push-pull transistor pairs can be formed using either conductivity type transistors, without patentable distinction, of which fact official notice is taken by the examiner. When all of the transistors of the two push-pull transistor pairs are formed using NMOS transistors, the limitations of claim 4 will be met.

As to claim 5, the use of any well-known load element or a tail current source elements between the push-pull transistors and VDDI/VSS will meet this limitation, and because such elements are also old and well-known in the art (and are used for well-known purposes), claim 5 similarly does not distinguish over the circuitry shown in Fig. 4 of Miura.

As to claim 6, the recited "adaptation circuit", though not disclosed, also would have been obvious because any person having ordinary skill in the art will easily recognize that the input signals applied to terminals 40 and 41 will be the outputs from an upstream circuit (note that the recitation in claim 6 of "lowering the impedance" cannot be relied upon to distinguish

over Miura because this limitation is indefinite and cannot be understood, as noted above).

As to claims 8 and 9, the use of the Miura amplifier circuitry in a telecommunication system would have been obvious to any person having ordinary skill in the art who will easily recognize that the Miura Fig. 4 can be used in any environment requiring a high-speed driver circuit. Thus, claims 8 and 9 also do not distinguish patentably over this reference under 35 USC 103.

Allowable Subject Matter

9. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Other Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth

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B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew N. Richards, can be reached at (571)272-1736. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kenneth B. Wells/
Primary Examiner
Art Unit 2816

January 19, 2008